

# IMPLEMENTATION OF THE RAPID APPLICATION DEVELOPMENT (RAD) METHOD IN THE CV ACCOUNTING INFORMATION SYSTEM. MAKMUR AUTO SEJAHTERA

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## ABSTRACT

In the era of the Industrial Revolution 4.0, business competition is getting tougher, encouraging institutions or companies to continue to improve the efficiency and productivity of their resources, including human resources and their management systems. The global crisis that arises is a process by which the entire business world, including the service sector and manufacturing industry, learns and experiences to continuously improve efficiency and effectiveness in resource management, including improving and running professional and quality human resources working to achieve company goals [1]. This also has an impact on companies engaged in the automotive sector. Competition in this field is getting tougher in Indonesia, especially in the type of motorized vehicle, namely private cars, which can be proven by the increasing number of official car dealers, new car brands that have sprung up and the number of car ownership that is increasing in Indonesia every year. Based on this background, the more competition that occurs, in this case each dealer will improve its system, in this case the sales system, inventory, recording to stocks. CV. Makmur Auto Sejahtera is one of the companies engaged in the automotive sector, namely the sale of spare parts (spare parts) of various car brands located in the city of Medan. The problem that occurs today is the lack of control over inventory such as the frequent difference in inventory when an adjustment of the balance will be made between the recording of the warehouse section and the office administration department, to the difference in the physical amount in the warehouse with the amount recorded on the warehouse stock card.

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- 1. INTRODUCTION** Indonesia is one of the consumptive countries, one of which is the number of car ownership which increases every year. This can be seen from the data released by the Central Statistics Agency on the development of the Number of Motor Vehicles by Type (Unit) in Indonesia from 2018 - 2020. Based on figure 1 of the table from BPS below, it can be seen that passenger car ownership is ranked second highest owned by people in Indonesia after motorcycles [2].

Jenis Kendaraan Bermotor	Perkembangan Jumlah Kendaraan Bermotor Menurut Jenis (Unit)		
	2018	2019	2020
Mobil Penumpang	14 830 698	15 592 419	15 797 746
Mobil Bis	222 872	231 569	233 261
Mobil Barang	4 797 254	5 021 888	5 083 405
Sepeda motor	106 657 952	112 771 136	115 023 039
Jumlah	126 508 776	133 617 012	136 137 451

- Sumber: Kepolisian Republik Indonesia  
 - Data tahun 2015-2018 revisi

Figure 1. Data on Car Users in Indonesia 2018-2020  
 Source: bps.go.id

This indicates that every year people in Indonesia always buy a car. Thus, the large market interest in private car ownership in Indonesia makes every automotive company compete to be able to stay afloat in order to realize the company's main goal of obtaining the greatest profit. In an effort to achieve these maximum profits, every automotive company is required to become an automotive company that grows, develops and has good and organized management and coordination of management, as for other goals that are no less important so that the company can maintain its survival.

A sophisticated and accurate system and information are needed to regulate this in order to maximize the performance of the company so that it can run well, and is supported by a good control system to regulate sales activities and cash receipts in accordance with the procedure. In this day and age, most companies use computerization to carry out company activities. With the support of a good information system and good internal control, a company can certainly have many advantages so that it can compete with other companies. Another big influence for companies if they have an information system, especially an accounting information system, is that it can maximize the company's own profits, and can provide accurate financial information so that its users are right in making decisions. A system is a series of interdependent parts that work together to achieve a specific goal [3]. A system must be composed of smaller sub-sub-systems that are also interdependent and work together to achieve goals.

The purpose of the research is to minimize disputes over sales data, recording, inventory to stocks by utilizing a simple distributed Accounting Information System as a solution to problems to make it easier to carry out a sales system. The urgency in the study is the high error factor in the system currently used in terms of sales, inventory, stock recording and others. Research Feasibility Study using the Rapid Application Development method, namely by applying it to a simple Accounting Information System. This research is very relevant to the RIRN 2017-2045 in the field of health and medicine, then in the 2020-2024 PRN on the theme of social humanities in the study of economics and human resources, Entrepreneurship, cooperatives and MSMEs.

## 2. METHOD

### 2.1 Research Type

- Requirement Planning, an initial stage that brings together users and analysts that aims to identify system goals and information needs to achieve goals. With the involvement of both parties, making this early stage is the most important thing.
- System Design Process, at this stage the activeness of the user who is directly involved in determining the achievement of goals. In this process improvement often occurs if there is still a design discrepancy between the user and the analyst.
- Implementation (Implementation/ Implementation), this stage is the stage of program creation by developing a program design that has been approved by users and analysts. This tea also conducts a trial error of the program before it is applied to an organization.

*Implementation Metode Rapid Application Development (Rad) on CV Accounting Information System.*

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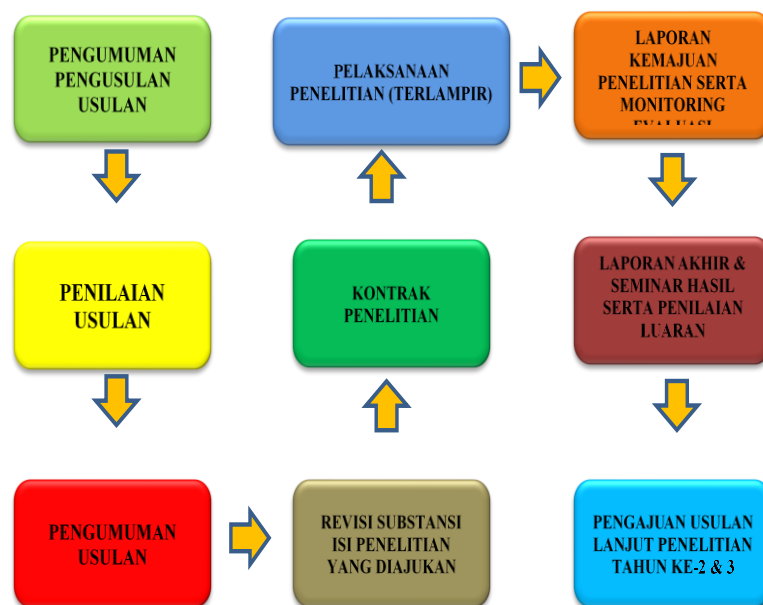
### 1. Time and Place

This research was conducted from March to July 2022, testing the effectiveness of the influence of the Accounting Information System on Sales, Inventory, and Stock Recording. Research location on CV. Makmur Auto Sejahtera located in Medan City.

### 2. Research Methods

In the implementation of this research, the RAD (Rapid Application Development) Research Method is used which functions to develop the existing Accounting Information System. By conducting trials first with several variables, namely, sales, procurement, and stock recording.

### 3. Research Chart



**Figure 1.** Research Chart

### 4. System Needs Analysis

To determine the needs of the CV. Makmur Auto Sejahtera in the development of the Accounting Information System in this case the needs of the system to be built must of course have communication between the developer and the user. So that the new system produced later can solve existing problems and the goals of building this system are achieved properly. The first system need is the determination of the use of the system which can be described in the following use car.

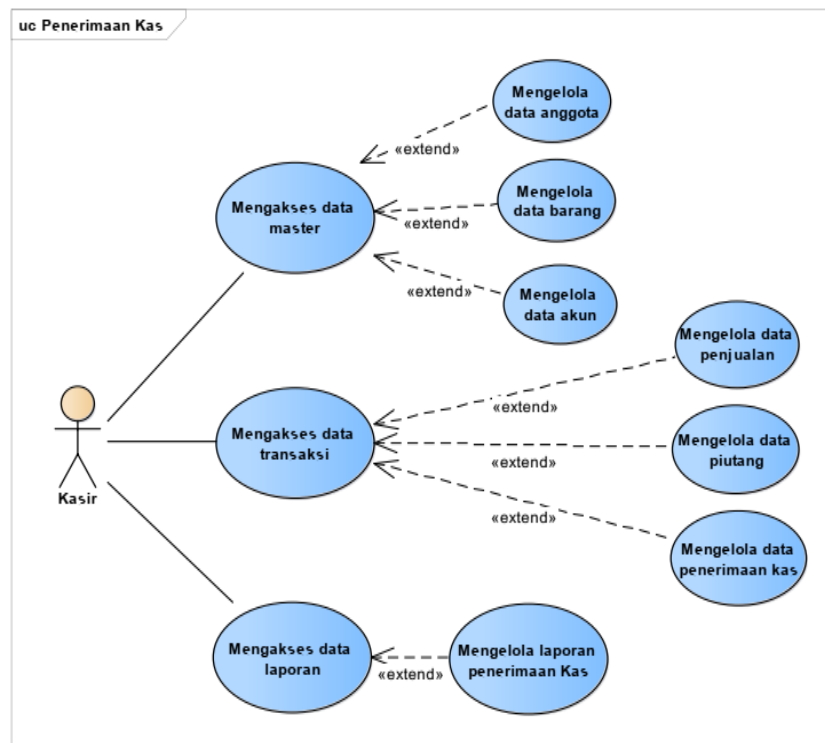


Figure 2. Use case System Requirements

### 3. RELUST AND DISCUSSION

#### A. Cash Sales Process

Customers come directly to the company and select the desired goods. Sales Promotion checks the availability of goods. If the goods are there, Finance Accounting will make a cash sales receipt. The receipt is handed over to the customer. The customer receives the receipt and makes a payment in accordance with the amount stated on the receipt. Finance Accounting accepts payments. If the item is not there then the customer chooses another item.

#### B. Credit Sales Process

Customers apply for credit by providing credit application requirements in the form of documents in the form of Identification Cards (KTP), Family Cards (KK), Taxpayer Identification Numbers (NPWP), proof of income (Salary Slip) and proof of savings account. The requirements are submitted to Sales Promotion. Sales Promotion forwards the requirements of the customer submitted to the Assisten Owner. Assisten Owner tests creditworthiness based on requirements from customers. If these requirements are deemed feasible, the Assistant Owner will agree and ask finance accounting to make a road letter and send the goods. The customer receives the goods and road mail. The customer pays the credit bill. Finance Accounting accepts credit payments from customers. But if the customer is deemed unfit then the terms will be returned to the customer.

#### C. Report Generation

At the end of the month, Finance Accounting will collect sales transactions and make financial statements from cash and credit sales transactions. The financial statements are made monthly and addressed to the Assistant Owner. Assistant Owner archives reports.

**Activity Diagram**

**1. Cash Sales Process**

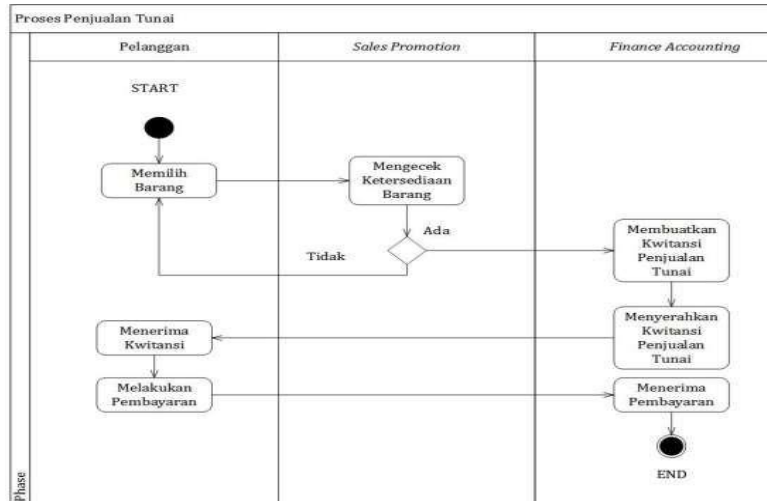


Figure 3. cash sales diagram activity

**Activity Diagram of Cash Sales Process**

**1. Credit Sales Process**

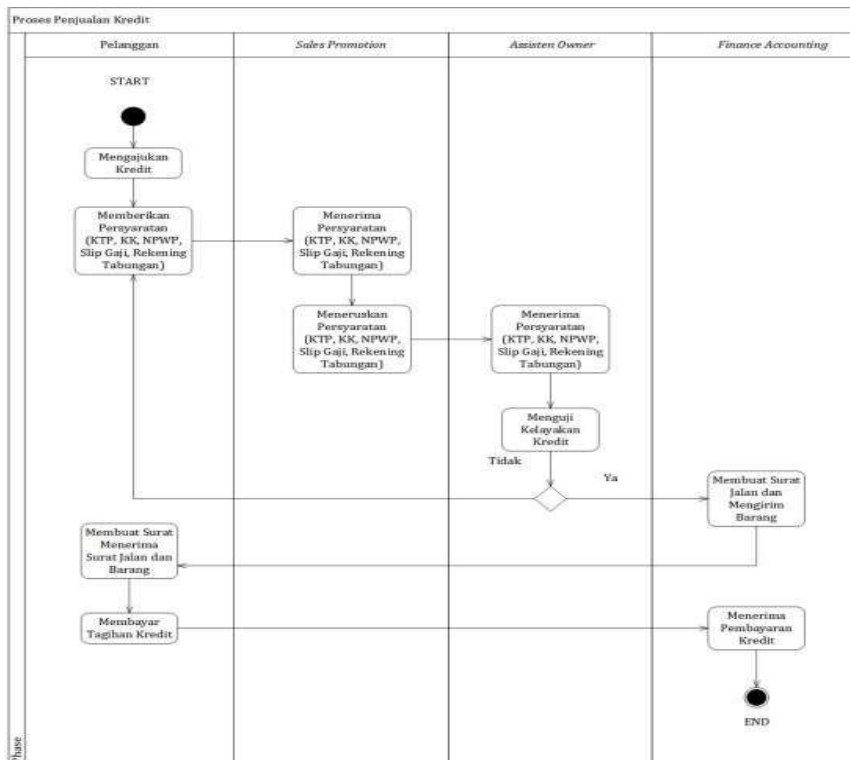


Figure 4. Activity Credit Sales Diagram

#### 4. CONCLUSION

Based on the results of observations and data collection regarding the sales system on cv. Prosperous Auto. The author can draw the following conclusions:

1. The current system regarding car sales transactions, both cash and credit, on CV. Makmur Auto is already running well, but the author found weaknesses in the process of recording data using Microsoft Excel. The recording caused a suboptimal recording process, therefore the author designed a desktop-based system to overcome these problems.
2. By using a computerized data storage system, dapat reduces the cost of purchasing office stationery and can save space for storing sales documents.

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